

Testimony of Save the Sound Before the Environment Committee In Support of

S.B. 979 AN PROMOTING ENERGY AFFORDABILITY, ENERGY EFFICIENCY AND GREEN CITIES

Submitted by Charles J. Rothenberger Climate & Energy Attorney February 27, 2023

Save the Sound is a nonprofit organization representing over 4,200 member households and 10,000 activists statewide. Our mission is to protect and improve the land, air, and water of Connecticut and the entire Long Island Sound region. We use legal and scientific expertise and bring citizens together to achieve results that benefit our environment for current and future generations.

Co-Chairs Lopes and Gresko, Ranking Members Harding and Callahan, and members of the Environment Committee:

S.B. 979 AN PROMOTING ENERGY AFFORDABILITY, ENERGY EFFICIENCY AND GREEN CITIES

Save the Sound <u>supports</u> SB 979, which will (1) extend DEEP's authority to procure competitively electric transmission services and infrastructure to secure more affordable, clean energy for the grid, enabling the State to better take advantage of competitive federal funding for transmission, (2) require landlords to provide a home energy label when they list homes or apartments for rent, (3) require electricians and plumbers to include some hours on nonfossil-fuel, nonelectric-resistance technologies in their next round of continuing education, without increasing the number of hours, (4) authorize municipalities to adopt a "stretch" building code that requires greater energy efficiencies and incorporation of renewable energy for buildings than the statewide building code does, and (5) establish adequate tree canopy coverage in low-income communities a policy goal of the state.

Transmission Procurement

This bill provides DEEP the authority to be help craft solutions to address deficiencies in the current transmission system. The need for cooperative, regional solutions to upgrade the regional electricity transmission grid to address winter reliability concerns and support increasing amounts of clean, renewable energy, particularly offshore wind, is well

established. Indeed, at a September FERC conference on winter reliability concerns, transmission upgrades were identified as essential to the solution.¹

Addressing winter reliability concerns while meeting our greenhouse gas reduction requirements will require the increasing electrification of our transportation and building sectors, allowing us to displace fossil fuels such as gasoline, diesel, natural gas, and heating oil with electricity generated from renewable energy sources such as wind and solar. It will also require upgrades to the current transmission system to move large quantities of renewable energy from areas where it is generated to load centers where the energy will be used.

This will require upgrades to the existing land-based transmission system, as well as a holistic approach to designing a new integrated offshore grid to accommodate the needed scale of offshore wind projects while maximizing the ability to avoid, minimize, and mitigate potential environmental impacts. Indeed, consensus around the need for an integrated offshore wind system appears to have been achieved with efforts underway in New Jersey and New England, and with New York requiring that proposed offshore wind projects be "mesh-ready" to allow them to plug into an offshore grid when it is available.

The necessary buildout of the existing transmission grid is substantial. However, there are factors mitigating the rate impact of this investment on utility customers. As noted in a 2019 study of the anticipated transmission buildout to support the nation's clean energy and climate goals, investment at the scale needed will likely result in relatively small or even positive rate impacts.² Factors leading to this outcome are "(1) transmission costs represent a small share of customer rates; (2) the total transmission investment will be spread over greater electricity demand with electrification; and (3) the higher costs of transmission are likely to be offset by lower generation costs."³

Further, development of a networked offshore wind grid is itself a measure that could reduce costs for ratepayers. Establishing a networked offshore grid should reduce aggregate offshore wind project costs by reducing the amount of offshore wind transmission infrastructure necessary to deliver power to shore, as well avoiding certain onshore upgrades. New Jersey's recently approved offshore wind network is projected to save customers over \$900 million.⁴ In New England, studies have estimated that avoided upgrades to the land-side grid through a well-developed offshore transmission network could save customers more than \$1 billion.⁵

¹ Federal Energy Regulatory Commission, New England Winter Gas-Electric Forum (Sept. 8, 2022), https://www.ferc.gov/news-events/events/new-england-winter-gas-electric-forum-09082022.

² Dr. Jurgen Weiss, et al., *The Coming Electrification of the North American Economy: Why We Need a Robust Transmission Grid* at v, Brattle Group (March 2019), https://wiresgroup.com/wp-content/uploads/2020/05/2019-03-06-Brattle-Group-The-Coming-Electrification-of-the-NA-Economy.pdf.

³ *Id*.

⁴ New Jersey Board of Public Utilities, Docket No. QO20100630, In the Matter of Declaring Transmission to Support Offshore Wind a Public Policy of the State of New Jersey, Order on the State Agreement Approach SAA Proposals at 2 (October 26, 2022), https://www.nj.gov/bpu/pdf/boardorders/2022/20221026/8A%20ORDER%20State%20Agreement%20Approach.pdf.

⁵ Johannes Pfeifenberger, et al., *Offshore Transmission in New England: The Benefits of a Better Planned Grid*, Brattle Group (May 2020).

Finally, the availability of significant federal funding to support upgrades to transmission infrastructure, increase the development of clean energy resources, and expand access to clean energy through the 2021 Infrastructure and Investment jobs Act and the 2022 Inflation Reduction Act should help to defray costs to ratepayers.

Home Energy Labeling

The energy burden faced by low-income households in Connecticut is significant. The average low-income household has an annual energy expenditure that is \$1,400 greater than the affordability threshold (defined as 6% of annual income). Highlighting the great disparities we must overcome, the total building energy burden in Connecticut ranges from a low of 1% to an incredible high of 22%.

Providing renters with information related to the energy expenditures that they will face as they consider signing a lease will (1) provide them with the information that they need in order to make important housing decisions and manage their budgets and (2) provide an incentive for landlords and building owners to make prudent investments in building weatherization and energy efficiency improvements as they seek to attract residents.

Connecticut has a significant amount of older housing stock that falls well below modern standards for energy efficiency, resulting in homes that are more expensive than necessary to heat in the winter and cool in the summer. Frequently, building envelopes are not insulated, windows provide little thermal benefit and heating and cooling systems do not perform optimally. These factors can significantly increase the operating expenses of a property, as well as contributing to impaired air quality and increased emissions of global warming pollutants as a result of increased combustion of fossil fuels.

Performance data from efficiency financing programs is showing that significant improvements can be done at relatively little cost and that these improvements more than pay for themselves in terms of energy savings. Connecticut has recently made a strong financial commitment to address the health and safety barriers that currently hinder efficiency efforts in older building stock. In 2021, the Low-Income Energy Advisory Board approved creation of a Weatherization Barrier Remediation Program with \$2 million of LIHEAP funding. Concurrently, Governor Lamont identified \$14 million in American Rescue Plan funding to address health and safety barriers and energy efficiency in low-income housing. These efforts can provide the foundation for a consistent, coordinated, and robust program to provide weatherization and energy efficiency improvements and lower the energy burden for low- and- moderate income households.

Municipal Stretch Codes

Residential and commercial buildings in Connecticut account for 26% of the state's greenhouse gas emissions. Improving the energy efficiency of our building stock, as well as ensuring that they are benefitting from renewable energy

⁶ Justine Sears and Leslie Badger, *Mapping Household Energy & Transportation Affordability in Connecticut*, VEIC at 16 (October 2020), https://www.veic.org/clients-results/reports/mapping-household-energy-and-transportation-affordability-in-connecticut.

sources and are capable of supporting electric vehicle charging is an important part of meeting our greenhouse reduction targets.

Our neighboring states of Massachusetts and New York have already developed and are implementing successful municipal stretch code programs.⁷ Recognizing the significant cost savings achievable though high performance building standards, Connecticut has already adopted high performance standards for buildings undergoing construction or renovations using public funds. This proposal allows local governments to adopt increased energy efficiency performance standards that will help to reduce energy costs for their residents, while also improving the value of the town's building stock. Green buildings have been shown to provide a host of environmental and economic benefits, including asset value, operating costs, and workplace productivity and health.⁸

Save the Sound supports all of the measures contained in SB 979, and urges the Committee to report the bill favorably out of Committee.

Thank you for your time and consideration of this testimony.

Respectfully submitted,

/s/ Charles J. Rothenberger

⁷ https://newbuildings.org/code/policy/utility-programs-stretch-codes/stretch-codes/.

⁸ See World Green Building Council, *The Business Case for Green Building: A Review of the Costs and Benefits for Developers, Investors and Occupants* (March 6, 2013), https://www.worldgbc.org/news-media/business-case-green-building-review-costs-and-benefits-developers-investors-and-occupants.